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## INFORMATION REPORT INFORMATION REPORT

## CENTRAL INTELLIGENCE AGENCY

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the Hungarian petroleum industry. The report 25X1  
deals mainly with petroleum research in the plains region. Most of  
the information is believed to be known.

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14 January 1959

Hungarian Petroleum Industry

[Organization, Exploration, Research Institute]

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Hungarian petroleum exploration, exploitation and production was originally under the jurisdiction of the Ministry of Chemical Industry but was later put under the jurisdiction of the Ministry of Mining and Power where it still is today. The following pages deal mainly with petroleum research in the plains region [Alfold].

The industry is organized in two main groups: One is MASZOLAJ (Hungarian - Soviet Petroleum Exploring Enterprise) with headquarters at Szolnok - Abony, about 12 kilometers from Szolnok. The geological drilling, exploitation, and production center of the Plains is also located here. The other is the Transdanubian center with headquarters at Nagykanizsa.

Both groups are directed by the Main Department of the Petroleum Industry which is part of the general directorate located at 42 Maxim Gorki Avenue, Budapest. The production of both groups is transported to the refinery at Szony. The refinery is part of the General Directorate of the Petroleum Industry and directly subordinate to the Ministry of Mining and Power.

Biharnagybajom is about 60 kilometers north of Debrecen. In 1949, 46-48 drilling rigs were set up here. The rigs struck natural gas having a pressure of 120 to 150 atmospheres. The probing was discontinued and only the gas was exploited. The gas was bottled and put on the market as propane gas. In addition, the gas serves

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the 15,000 residents of the town of Nagybajom. Although rich deposits of oil were expected here, they were lost as a result of unskillful drilling, and only a little oil which soon became watery was produced. The oil is piped to the station and transported to Szony via railroad, in tank cars.

The first 80 exploratory drillings were made at Mezokeresztes in 1951. This field and its output were under Soviet management till 1953. Exploration, exploitation and production were carried on in the so-called "crumbly layer" and depths of 1,600-1,800 meters were reached. Sixteen derricks were erected. By 1957, only 5 or 6 were producing steadily. Their daily output amounted to from 25 to 30 cubic meters. On the otherhand, the daily output of a producing derrick in Transdanubia is 80 cubic meters. Since output was so meager, the management was obliged to resort to the use of oscillating pumps. [REDACTED] 25X1

the cost of this type of production at approximately 1.5 billion forints per 2,000 meter depth. The costs of amortization amounted to an average of 37,000 forints per day. The B - U 40 type drilling rig was used on this field. Later a German-rig, the "Trautzi," was used. Since yields are very poor here, too, no new exploration nor exploitation was undertaken after 1957. The crude oil from this field is piped to the community of Csincse from where it is shipped in tank cars to the refinery at Szony. There are about 100 workers, 3 engineers, 1 geologist and a small group of administrative employees at this field. *a quarterly bonus the size of which depends on production.* The chief engineers receive 2,400 forints a month, plus ~~a bonus~~. To date, this bonus has amounted to about 8,000 forints per quarter year.

Exploratory drillings were also made at Karcag, Kaba, and Kisujszallas. No oil was discovered in these places and the explorations were discontinued.

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Drilling has been going on at Demjen since July 1952. "Krelius" rigs are being used, but only small quantities of oil are said to exist here.

About 25 or 30 drillings were made at Nadudvar in 1954 at a cost of over one billion forints. Only natural gas was found.

Exploratory drillings were also made at Ozd.

Deep drilling before 1957 at Kiskoros failed to disclose any deposits of oil.

Four or five exploratory drillings were made at Tortel, near Szolnok and Abony, but to date no oil has been found. Halfway between Szolnok and Abony, exploratory drillings revealed natural gas at a pressure of about 180 atmospheres. The gas eruption was temporarily stopped but when efforts were made later to channel and utilize the gas, it was found to have disappeared.

During World War II, the Germans struck natural gas at Totkomlos. The Soviets continued the exploratory drillings in 1949 and reached a depth of 1,900 meters. As a result of the use of obsolete equipment and careless work, even the working sites were damaged. In 1956, the Soviets tried this site again, using more modern, hydraulic Cameron gear to prevent outbreaks. These operations are still in progress, but the outcome is unknown as yet.

In 1953, three exploratory drillings were made at Nyiregyhaza, but it is said that they attained no positive results.

In 1953, the Soviets sold the operations they had begun to Hungary. [redacted] the

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sites explored have a greater potentially exploitable value than was officially admitted. For national reason, their actual wealth was purposely concealed from the Soviets by the Hungarians and deliberately not exploited.

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MAFKI (Magyar Asvanyolaj es Foldgaz Kiserleti Intezet-Hungarian  
Petroleum and Natural Gas Research Institute)

This institute is located in the western part of Veszprem at 2-6 Vince Wartha Street which is the street leading to Vamos. The building was completed in 1948 and occupies a site of 4 cadastral yokes [one yoke equals 1.42 acres]. NEVIKI (Nehez Vegyipari Kutato Intezet - Research Institute of the Heavy Chemical Industry) occupies the same site. The MAFKI building is <sup>four [by American count]</sup> ~~three~~ stories high, 120-meters long and 20-meters wide. It is made of stone and has a substantial basement. The job of the institute is to analyze the petroleum and gas oil produced, and to conduct research for the purpose of establishing procedures which will yield the best oil for prolonging the life of the motors in which the oil is used.

The institute was established by the following three persons:

Dr. Mihaly Freund, formerly professor of Budapest Technical University,  
Kossuth [redacted] 25X1

[redacted]; Dr. Karoly Polinszky, chemist, formerly dean of the  
University of the Chemical Industry, Veszprem [redacted] 25X1

[redacted] Dr. Jozsef Berty, chemist [redacted]

[redacted] the MAFKI rest home at

Balatonalmadi.

When MAFKI, which originally operated under very modest circumstances in Budapest, was moved to Veszprem, it was given a construction credit of 15-20 million forints. The move to Veszprem was made because of the proximity there to well-developed chemical industries at Petfurdo, Peremarton, Baltonfuzfo, Urkut, and Ajka.

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The University for the Chemical Industry was built in 1950, and MAFKI was completed in 1951.

Because of the great lack of chemists, a 3-month course for laboratory technicians was given in July 1951. About 60 men and women took the course, and after its completion, some of them were employed by MAFKI while others went to work for the neighboring Research Institute of the Heavy Chemical Industry, NEVIKI. Professors from the university and chemists from MAFKI lectured at the training course.

The employees of both research institutes are housed in two ~~2~~<sup>3</sup>-story apartment houses at 3 Jozsef Attila Street as well as other houses rented by the institutes in the city.

The layout of the central building of MAFKI is as follows: There are 20 rooms in the basement. These include a locksmith shop, carpenter shop, supplyroom, and the office of the heads of the laboratories. The locksmiths, mechanics, electricians, lathe operators and visiting technicians who make special apparatus for various kinds of oil research are located in the basement also. An underground passage connects the basement of MAFKI with NEVIKI. A transformer has been built into the passage to provide both institutes with electricity from the city power works. This power works is on the road to Balatonalmadi opposite the small station [not further identified] of the Honved barracks. The institutes also have a common central heating plant and water supply.

On the ground floor is the main office of the director, Dr. Mihaly Freund, also 4 offices of the head bookkeeping department. Although Freund's permanent office is in Budapest, he comes to Veszprem every Tuesday and Friday. During his absence, the chemist, Gabor Kovats acts as his deputy. The chief accountant is Jozsef Poczik

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[redacted]

He is in charge of the bookkeeping department, the financing group, the work and payroll accounting group, the management, the records section, and the institute telephone switchboard. A small workshop for electricians and one for glassworkers are also situated on the ground floor. The latter shop makes and reshapes glass tubes as needed. Sandor Tovizi is the glassworker [redacted] 25X1

[redacted] Beside these shops is a small supply room in which raw materials, benzine, acetone, alcohol, calcium, etc; are stored. The supplies are valued at several million forints. Miklos Szabo is in charge of the supply room. [redacted] 25X1

[redacted] Mrs Janos Bajor is [redacted]

[redacted] in charge of the shop group. Her husband is in charge of materials. [redacted]

[redacted] Mrs. Robert Haeffner is in charge of the telephone switchboard on the ground floor. [redacted] 25X1

[redacted] her son, Robert, works as laboratory technician in the chemical-physics department.

The most delicate and precise measuring instruments are kept in the microlaboratory [also presumably on the ground floor].

On the first floor in room 101 is the office of the deputy director, Gabor Kovats. [redacted] 25X1

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Endre Vamos, Nyul's deputy, is a chemist

is the second leading chemist

of the Oil Department.

Berty

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[REDACTED]

The only mechanical engineer of the Institute is also located on the second floor. He designs the machinery required for experiments and supervises its construction. The organic department produces intermediate products of the industry from products of thermal decomposition. For instance, alcohol and acetone are produced from natural gas. This department also produces synthetic substances for improving lubricating oils.

The Technical Department is under the direction of Jozsef Fodor who completed technical school. [REDACTED]

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[REDACTED]

The Construction and Planning Office was in charge of the following: organization and inspection of experiments, payroll, compiling of documentation, acquisition of specialized periodicals, recommending the purchase of raw materials, personnel counselling, the control of secret files. This department is under the direction of Ervin Kerenyi.

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On the third floor is the Chemical-Physical Department. Among other things, this department subjects crude oil to heat for the purpose of producing better-grade motor fuel. Approximately 30 persons work in this department.

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The department head is Dr. Pal Benedek. [REDACTED]

[REDACTED]

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Benedek's deputy is Laszlo Szepessy.

Zsigmond Sebestyen is in charge of the sub-department, "KRAKKOLC."

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On the third floor

is the library, for specialized literature. The librarian is

Magdolna (Magda) Gratz

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Regulations Concerning Photostats:

To prevent espionage and the theft of shop secrets certain regulations govern the making of photostatic copies. Photostating equipment is available for making copies of technical drawings. A log is kept of the acquisition and use made of photostatics supplies and the use to which finished photostats are put. At present, photostating equipment and all other duplicating equipment is controlled by the police. After the Revolution, all such equipment had to be turned over to the police. Photostats could be made only in the

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presence of a police officer. Later, this equipment was returned to the Institute.

#### Pilot Plants

The pilot plant at Petfurdo employs about 30 persons. Processes and theories evolved at the Institute in Veszprem are tested here. The plant is under the direction of MAFKI. During the summer of 1957, the chemist, Istvan Kadar, was in charge of the plant.

A second pilot plant is located in Budapest, opposite the technical university, at 13-15 Budafoki Street. A total of about 30 chemists, technicians, and laboratory technicians is employed here. Each plant has its own skilled workers such as lathe operators and locksmiths. The Supply Department and the Administration for Investment Matters <sup>are</sup> also located here.

Dr. Mihaly Freund spends several days of the week here. <sup>e</sup> ~~He~~ is also in charge of the experimental meteorological station of MAFKI which is located on Papai Road.

Every day between 10:00 and 11:00 hours, long distance calls are made between the Institute headquarters in Veszprem and the pilot plants so that urgent technical problems can be discussed.

In 1957, the employees of the Institute including those at the pilot plants in Petfurdo and Budapest numbered 220 persons. These were broken down as follows: Chemists in Veszprem: 49; in Budapest: 10; One mechanical engineer in Veszprem; Technicians in Veszprem: 30; in Budapest: 5; and in Petfurdo: 5; Laboratory technicians in Veszprem: 60; in Budapest: 10; in Petfurdo: 4; Skilled workers: 22; Administrative workers: 24. Seventy of these persons were women.

The annual budget of MAFKI amounts to about 8 million forints. The sum is advanced through the Ministry of Chemical Industry and Power in quarterly installments. Accounts are submitted every month. Finances are managed according to a preprepared annual financial plan. The Hungarian National Bank in Veszprem controls the financial plan.

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Bills are paid by check. Daily expenses such as cost of travel, advances in salary, wages of workers which are paid semi-monthly are paid in cash by the cashier.

Average monthly wages in forints are as follows:

director	3,500
deputy	3,200
department head	3,000
experienced chemist	2,800
new chemist	1,400
technician	1,800
experienced laboratory technician	1,400
beginning laboratory technician	750
skilled worker	1,300
chief accountant	3,500
accountant	1,600
typist	960
chauffeur	1,300
doorman	750

Premiums are paid quarterly provided that a timely series of tests has been evolved [sic]. Payments are made on 4 April, 20 August, and 7 November. No person is entitled to more than one premium per year, with exception of special favorites. Premiums range from 2,000 to 4,000 forints for engineers, and 500 to 1,000 forints for laboratory technicians.

Average fluctuation is from 500 to 1,000 forints.

Material is shipped to the Institute partly in its own vehicles and partly through public transport lines such as TEFU (state trucking enterprise) and BELSPED.

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The building has a freight elevator in which supplies can be taken to various floors from the supply room. The elevator is also used illegally for carrying passengers.

The Institute receives its power through a transformer from the city power plant. Flasks of propane-butane gas are also used as a source of energy in the laboratories.

#### Security Measures

There is no regular night watchman, guard, or fire brigade. Both entrances of the Institute are open in the daytime and supervised by doormen. The doormen work in three shifts of 8 hours each. Strangers have to identify themselves on entering. The doors are locked at 2200 hours. The Institute has a direct line to the local fire department. *No other connection can be made on this line, which make a cross-connection impossible.*

MAFKI is in constant contact with its neighboring institute for the heavy chemical industry, NEVIKI. They share both heat and power, but they work independently. MAFKI is under the jurisdiction of the Ministry of Chemical Industry and Power, while NEVIKI is under the Ministry of Heavy Industry. Both institutes are connected with the university and send their chemists to lecture there, while students come to their laboratories to get practical training.

MAFKI and NEVIKI have in common a dinning hall, the so-called "home for professionals," a convalescent home at Balatomalmadi where employees and their families can take cheap vacations, and a day nursery where children and babies are taken care of all day for a monthly fee of 60 to 80 forints.

MAFKI has no connection to the Soviet Union. It is a purely Hungarian institution. However, it does work with oil specimens from the USSR, too. There is a connection with Rumania inasmuch as a joint Rumanian-Hungarian company was established in Bucharest. Here chemists of both countries conduct experiments on Rumanian oil. The Hungarian

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chemist, Ivan Pallay [redacted] represents MAFKI in 25X1  
Bucharest. [redacted] The  
plant manager in Bucharest is Janos Karoly. Another chemist there is  
Andras Nemeth. Originally, a similar joint enterprise was to have  
been established between Hungary and the GDR. However, it is not 25X1  
known whether or not this plan was ever carried out.

[redacted]

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